10/049792

JC07 Rec'd PCT/PTO 1 4 FEB 2002

Practitioner's Docket No.

542-007-2

PATENT

Preliminary Classification:

Proposed Class: 257

Subclass:

NOTE: "All applicants are requested to include a preliminary classification on newly filed patent applications. The preliminary classification, preferably class and subclass designations, should be identified in the upper right-hand corner of the letter of transmittal accompanying the application papers, for example 'Proposed Class 2, subclass 129.' " M.P.E.P. § 601, 7th ed.

TRANSMITTAL LETTER TO THE U.S. DESIGNATED OFFICE (DO/US)— ENTRY INTO THE U.S. NATIONAL STAGE UNDER CHAPTER I

INTERNATIONAL APPLIC	CATION NO.	INTERNATIONAL	L FILING DATE	PRIC	PRITY DAT	E CLAIME	D	
PCT/JP01/0	04824	June 7,	2001		June	19,	2000_	
TITLE OF INVENTION		Substrate,						ith
	and Ma	nufacturing	Method	for Ar	ray	<u>Subst</u>	<u>rate</u>	
APPLICANT(S)						•		
	Hirono	ri AOKI						

Box PCT

Assistant Commissioner for Patents

Washington D.C. 20231

ATTENTION: DO/US

NOTE: The completion of those filing requirements that can be made at a time later than 20 months from the priority date results from the Commissioner exercising his judgment under the authority granted under 35 U.S.C. § 371(d). The filing receipt will show the actual date of receipt of the last item completing the entry into the national phase. See 37 C.F.R. § 1.491, which states: "An international application enters the national stage when the applicant has filed the documents and fees required by 35 USC 371(c) within the periods set forth in § 1.494 and § 1.495."

CERTIFICATION UNDER 37 C.F.R. § 1.10*

(Express Mail label number is mandatory.) (Express Mail certification is optional.)

I hereby certify that this Transmittal Letter and the papers indicated as being transmitted therewith is being . in an envelope as "Express Mail Post Office to Addressee," mailing Label Number EV 005524177 US dressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231.

Judith Schick

(type or print name of person mailing paper)

Signature of person mailing paper

(Transmittal Letter to the United States Designated Office (DO/US)-Entry into National Stage under 35 U.S.C. § 371 [13-6]—page 1 of 8)



10/049792 Rec'd PCT/PTO 1 4 FEB 2002

WARNING: Where the items are those that can be submitted to complete the entry of the international application into the national phase subsequent to 20 months from the priority date, the application is still considered to be in the international stage. And if mailing procedures are utilized to obtain a date the express mail procedure of 37 C.F.R. § 1.10 must be used (because international

a date the express mail procedure of 37 C.F.R. § 1.10 must be used (because international application papers are not covered by an ordinary certificate of mailing. 37 C.F.R. § 1.8(2)(xi)).

WARNING: Documents and fees must be clearly identified as a submission to enter the national stage under 35 U.S.C. § 371, otherwise the submission will be considered as being made under 35 U.S.C. § 111. 37 C.F.R. § 1.494(f).

WARNING: Failure to pay the national fee within 20 months from the priority date will result in the abandonment of the application. The time for payment of the basic fee is not extendable. M.P.E.P. § 1893.01(a)(1), 6th ed., rev. 3.

- 1. Applicant herewith submits to the United States Designated Office (DO/US) the following items under 35 U.S.C. § 371:
 - a. This express request to immediately begin national examination procedures (35 U.S.C. § 371(f)).
 - b. A The U.S. National Fee (35 U.S.C. § 371(c)(1)) and
 - other fees (37 C.F.R. § 1.492), as indicated below:

2. Fees

CLÁIMS FEE	(1) FOR	(2) NUMBER FILED	(3) NUMBER EXTRA	(4) RATE	(5) CALCULA- TIONS		
- *	TOTAL CLAIMS	Z (−20 =	1 -	×\$ 18.00=	\$ 18.00		
	INDEPENDENT CLAIMS	y −3=	1	×\$ 8 7 .00 =	\$ 18.00 84.00		
	MULTIPLE DEPI	ENDENT CLAIM(S) (if	applicable)	+ \$270.00			
BASIC FEE**	The international search fee, as set forth in § 1.445(a)(2) to be paid to the US PTO acting as an International Searching Authority: has been paid (37 CFR 1.492(a)(2))						
		as not been paid (37					
	Ø w h:						
	1	ne Japanese Patent (.492(a)(5))		\$\$\$0.00	890.00		
		ve Calculations	= 992.00				
SMALL ENTITY	Reduction by ½ must be filed al	-					
		992.00					
	Fee for recording the enclosed assignment document \$40.00 (37 CFR 1.21(h)). (See Item 10 below). See attached "ASSIGNMENT COVER SHEET (37 C.F.R. § 3.34)".						
TOTAL			Total	Fees enclosed	\$1032.00		

^{*}See attached Preliminary Amendment Reducing the Number of Claims.

**WARNING: "To avoid abandonment of the application, the applicant shall furnish to the United States Patent and Trademark Office not later than the expiration of 20 months from the priority date: * * * (2) the basic national fee (see § 1.492(a)). The 20-month time limit may not be extended." 37 C.F.R. § 1.494(b).

(Transmittal Letter to the United States Designated Office (DO/US)—Entry into National Stage under 35 U.S.C. § 371 [13-6]—page 3 of 8)

10/	049792
3 Rec'd PCT/PTO	

12	Atta	ache	ed is a	a 🖄 che	ck [] monėy	order in	n the a	amoun	t of \$_	1,0	<u> 3고.</u>	00
				is hereb									-
٠		·to	Depo	sit Accou	int No	_23	-04	42					
				t card as 0-2038.	show	n on the	attache	ed cred	dit car	d inforr	mation	author	ization
WAR	NING	: C	redit ca	ard informa	tion sho	uld not be	included	on this	form a	s it may	become	public.	
Ø				additional orized ab		required	by this	paper	or cre	dit any	overpa	ayment	in the
	A d	lupli	cate o	of this pa	per is	attached	i .						
WAR		su in as da Ei re	ubmitted onder in order in order in order a con- order a	Instations of the appendix of	oplicant on a perio abandon ocepting of the p oter than sult in a	within twen od of time w ment. The p the oath o processing t twenty (20) bandonme	nty (20) m vithin whice payment of r declaratifee set for months a nt of the	onths fro ch to file of the su ion later rth in § after the applicati	om the trailircharge than two 1.492(f) priority ion. The	priority on enslation a enstation a entry (20) entry (2	late, the and/or oa in § 1.4 months red for a flure to cons of §	applican ath or dec 492(e) is a after the acceptant omply wi 1.136 wi	it will be claration required e priority ce of an ith these
3.	A c	ору	of th	e Interna	tional	application	on as fil	led (35	U.S.0	C. § 37	71(c)(2)):	
	a.		is tra	ansmitted	here	with.							
		b.		s not rec Receiving			applica	tion w	as file	ed with	the L	Jnited	States
		C.	⊠ h	as been	transn	nitted							
			i.	Ø by the form	e Interi PCT/IE	national E 3/308):	Bureau. 12/2	Date 0	of mail	ing of t	he app	lication	n (from
			ii.	☐ by ap	plican	t on			(Da	ate)			
NOTE	ap "T ac th al ap Be	oplica The Ir ccord ne cor I desi oplica ureau	ntion mentemation lance we mmunic gnated ant desi n, applic	I(b) was arr ust be filed onal Bureau vith PCT Ar cation to the offices as o ires to ente cant need o subsequent	with the unormanticle 20. White e office conclusion the name of the payers.	e Office by ally provides . At the sai . In accordative evidence ational stage the basic ri	y 20 mont is the cop me time, ance with e that the e and app pational fe	ths from y of the the Intel PCT Ru commu olicant h e by 20	the printernal mational late 47.1, inication las recembers the months	ority date tional ap Il Bureau , that not has duly ived noti s from the	e to avoi plication notifies rice shall taken p ce from e priority	id aband to the (the app be acce lace. Thu the Inter	onment. Office in licant of epted by us, if the mational This can
4.	X			ition of th		mational	applica	ation in	nto the	e Englis	sh lang	uage	
		a.	⊠ is	transmit	tted he	erewith.							
		b.	□is	not requ	uired a	as the ap	plicatio	n was	filed i	n Engli	sh.		
		c.	□ w	as previ	ously t	transmitte	ed by a	pplica	nt on .			.	(Date)

10/049792 13 Rec'd PCT/PTO 1 4 FEB 2002

5.	Amendments (35 U.S.C. §		of the Internati	tional appli	cation ι	under	PCT	Article	9 19
NOTE	 ha Alatina of Inn	7 4000 !!'		0 4 40 44 0					

practice that PCT Article 19 Amendments must be submitted by 20 months from the priority date, we time may not be extended." This Notice further advises: "Of course, the failure to do so does not in loss of the subject matter of PCT Article 19 amendments. The applicant may submit that su matter in a preliminary amendment filed under Section 1.121. In many cases, filing an amendment is		,0,		·. •.	3 01 1(0)(0)).				
b. have been transmitted i. by the International Bureau. Date of mailing of the amendmen (from form PCT/IB/308):	NOTE:	praction time in loss matter Section	The Notice of January 7, 1993 indicates that 37 C.F.R. § 1.494(d) was "amended to clarify the existing practice that PCT Article 19 Amendments must be submitted by 20 months from the priority date, which time may not be extended." This Notice further advises: "Of course, the failure to do so does not result in loss of the subject matter of PCT Article 19 amendments. The applicant may submit that subject matter in a preliminary amendment filed under Section 1.121. In many cases, filing an amendment under Section 1.121 is preferable since grammatical or idiomatic errors may be corrected." 1147 O.G. 29-40, at 35. See item 11(c) below. See also 37 C.F.R. § 1.494(d).						
i. by the International Bureau. Date of mailing of the amendmen (from form PCT/IB/308): ii. by applicant on		a.		are	transmitted herewith.				
ii. □ by applicant on		b.		hav	e been transmitted				
 c. ⋈ have not been transmitted, as i. □ no notification has been received that the International Sea Authority has received the Search Copy. ii. □ the Search Copy was received by the International Search Authority, but the Search Report has not yet been issued. Dat receipt of Search Copy (from form PCT/ISA/202): □ iii. ⋈ applicant chose not to make amendments under PCT Article Date of mailing of Search Report (from form PCT/ISA/2 □ iv. □ the time limit for the submission of amendments has not yet expirate amendments, or a statement that amendments have not be made, will be transmitted before the expiration of the time limit ur PCT Rule 46.1. 6. ⋈ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. § 371(c)(3)): a. □ is transmitted herewith. b. □ is not required as the amendments were made in the English language. ⋈ has not been transmitted for reasons indicated at point 5(c) above An oath or declaration of the inventor, including power of attorney, (35 U.S.§ 371(c)(4)) complying with 35 U.S.C. § 115 a. □ was previously submitted by applicant on			i.						
 i. no notification has been received that the International Sea Authority has received the Search Copy. ii. the Search Copy was received by the International Search Authority, but the Search Report has not yet been issued. Dat receipt of Search Copy (from form PCT/ISA/202):			ii.		by applicant on	(Date)			
Authority has received the Search Copy. ii.		c.	×	hav	e not been transmitted, as				
Authority, but the Search Report has not yet been issued. Dat receipt of Search Copy (from form PCT/ISA/202): iii. applicant chose not to make amendments under PCT Article Date of mailing of Search Report (from form PCT/ISA/2			i.						
iv. the time limit for the submission of amendments has not yet expirate amendments, or a statement that amendments have not be made, will be transmitted before the expiration of the time limit un PCT Rule 46.1. A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. § 371(c)(3)): a. is transmitted herewith. b. is not required as the amendments were made in the English languate. An oath or declaration of the inventor, including power of attorney, (35 U.S.§ 371(c)(4)) complying with 35 U.S.C. § 115 a. was previously submitted by applicant on			ii.		Authority, but the Search Rep	port has not yet been issued. Date of			
The amendments, or a statement that amendments have not be made, will be transmitted before the expiration of the time limit un PCT Rule 46.1. A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. § 371(c)(3)): a. is transmitted herewith. b. is not required as the amendments were made in the English language. An oath or declaration of the inventor, including power of attorney, (35 U.S. § 371(c)(4)) complying with 35 U.S.C. § 115 a. was previously submitted by applicant on			iii.	Ø	Date of mailing of Search				
 (35 U.S.C. § 371(c)(3)): a. ☐ is transmitted herewith. b. ☐ is not required as the amendments were made in the English language. c. ★ has not been transmitted for reasons indicated at point 5(c) above. 7. ★ An oath or declaration of the inventor, including power of attorney, (35 U.S.§ 371(c)(4)) complying with 35 U.S.C. § 115 a. ☐ was previously submitted by applicant on			iv.		The amendments, or a staten made, will be transmitted befo	nent that amendments have not been			
 b. □ is not required as the amendments were made in the English language. c. ★ has not been transmitted for reasons indicated at point 5(c) above. 7. ★ An oath or declaration of the inventor, including power of attorney, (35 U.S. § 371(c)(4)) complying with 35 U.S.C. § 115 a. □ was previously submitted by applicant on	6. 🗶	(35)	trans U.S	latio .C.	on of the amendments to the of \$ 371(c)(3)):	claims under PCT Article 19			
c. An oath or declaration of the inventor, including power of attorney, (35 U.S. § 371(c)(4)) complying with 35 U.S.C. § 115 a. Was previously submitted by applicant on		a.		is tr	ransmitted herewith.				
c. An oath or declaration of the inventor, including power of attorney, (35 U.S. § 371(c)(4)) complying with 35 U.S.C. § 115 a. Was previously submitted by applicant on		b.		is n	ot required as the amendment	s were made in the English language.			
 An oath or declaration of the inventor, including power of attorney, (35 U.S. § 371(c)(4)) complying with 35 U.S.C. § 115 a. was previously submitted by applicant on		c.	X	has	not been transmitted for reas	ons indicated at point 5(c) above.			
 b. is submitted herewith, and such oath or declaration i. is attached to the application. ii. identifies the application and any amendments under PCT Art 19 that were transmitted as stated in points 3(b) or (c) and 5(b); states that they were reviewed by the inventor, as required by 37 C.I § 1.70. 	7. 🔀	C An	oath	or	declaration of the inventor, inc	cluding power of attorney, (35 U.S.C.			
 i. is attached to the application. ii. iii. iii. iiii iiii iiii iiii iii		a.		was	previously submitted by appl	icant on (Date)			
 i. is attached to the application. ii. iii. iii. iiii iiii iiii iiii iii		b.	X	is s	ubmitted herewith, and such o	oath or declaration			
19 that were transmitted as stated in points 3(b) or (c) and 5(b); states that they were reviewed by the inventor, as required by 37 C.I § 1.70.									
iii. 🗌 will follow.			ii.	19 sta	that were transmitted as state ates that they were reviewed by	ed in points 3(b) or (c) and 5(b); and			
			iii.		will follow.				



10/049792 3 Rec'd PUTIFIO 1 4 FEB 2002

Other document(s) or information included:

8.	X	An	international Search Report or Declaration under PCT Article 17(2)(a):	
		a.	is transmitted herewith.	
		b.	M has been transmitted by the International Bureau. Date of mailing (from form PCT/IB/308):/2/27/01	
		C.	is not required, as the application was searched by the United States International Searching Authority.	>
		d.	☐ will be transmitted promptly upon request.	
		e.	☐ has been submitted by applicant on (Date)	
		f.	☐ is not transmitted, as the international search has not yet issued.	
9.	Ø	An	Information Disclosure Statement under 37 C.F.R. §§ 1.97 and 1.98:	
		a.	is transmitted herewith.	
			Also transmitted herewith is (are)	
			✓ Form PTO—1449 (PTO/SB/08A and 08B)	
			Copies of citations listed	
		b.	☐ will be transmitted within THREE MONTHS of the date of submission of requirements under 35 U.S.C. § 371(c).)
		c.	☐ was previously submitted by applicant on (Date)	
10.	Ø	An	assignment document is transmitted herewith for recording. A separate	
		×	"COVER SHEET FOR ASSIGNMENT (DOCUMENT) ACCOMPANYING NEW PATENT APPLICATION" or	/
			FORM PTO—1595	
		is a	elso attached.	
			☑ Please mail the recorded assignment document to:	
			i. 🛛 the person whose signature and address appears below.	
			ii.	

11. 🔀	, Ad	ditional documents
•	a.	☐ Copy of request (PCT/RO/101)
	b.	☑ International Publication No. WOOI/98823-A1
		i. Specification, claims and drawing
		ii. 🔀 Front page only
	C.	☐ Preliminary amendment (37 C.F.R. § 1.121)
	d.	*Other Form PCT/IB/304
12. 🛚	The	e above checked items are being transmitted
	a.	☐ before the 18th month publication.
	b.	☐ after publication and the article 20 communication, but before 20 months from the priority date.
	C.	after 20 months (revival).
		n to revive (37 C.F.R. § 1.137(a) or (b)) is necessary if 35 U.S.C. § 371 requirements are submitted 0 months.
13. 🗌		rtain requirements under 35 U.S.C. § 371 were previously submitted by the plicant on (Date) namely:
		AUTHORIZATION TO CHARGE ADDITIONAL FEES
WARNIN		ccurately count claims, especially multiple dependant claims, to avoid unexpected high charges extra claims are authorized.
	or futulas inco charge a cons for an in § 1 reply n	Iten request may be submitted in an application that is an authorization to treat any concurrent representation representation for an extension of time under this paragraph for its timely submission, proporating a petition for extension of time for the appropriate length of time. An authorization to all required fees, fees under § 1.17, or all required extension of time fees will be treated as structive petition for an extension of time in any concurrent or future reply requiring a petition extension of time under this paragraph for its timely submission. Submission of the fee set forth 1.17(a) will also be treated as a constructive petition for an extension of time in any concurrent equiring a petition for an extension of time under this paragraph for its timely submission." 37 § 1.136(a)(3).
	reason	ants of twenty-five dollars or less will not be returned unless specifically requested within a able time, nor will the payer be notified of such amounts; amounts over twenty-five dollars may urned by check or, if requested, by credit to a deposit account." 37 C.F.R. § 1.26(a).
×		ase charge, in the manner authorized above, the following additional fees that y be required by this paper and during the entire pendency of this application:
		X 37 C.F.R. § 1.492(a)(1), (2), (3), and (4) (filing fees)
WARNIN		ecause failure to pay the national fee within 20 months without extension (37 C.F.R. § 1.494(b)(2)), sults in abandonment of the application, it would be best to always check the above box.
		☐ 37 C.F.R. § 1.492(b), (c), and (d) (presentation of extra claims)
;	must o set for to auth	se additional fees for excess or multiple dependent claims not paid on filing or on later presentation only be paid or these claims cancelled by amendment, prior to the expiration of the time period response by the PTO in any notice of fee deficiency (37 C.F.R. § 1.16(d)), it might be best not notice the PTO to charge additional claim fees, except possibly when dealing with amendments and action.
		☐ 37 C.F.R. § 1.17 (application processing fees)
		37 C.F.B. § 1.17(a)(1)–(5) (extension fees pursuant to § 1.136(a))

(Transmittal Letter to the United States Designated Office (DO/US)—Entry into National Stage under 35 U.S.C. § 371 [13-6]—page 7 of 8)



Rec'd PCT/PTO 1 4 FEB 2002

37 C.F.R. § 1.18 (issue fee at or before mailing of Notice of Allowance,
pursuant to 37 C.F.R. § 1.311(b)).

NOTE: Where an authorization to charge the issue fee to a deposit account has been filed before the mailing of a Notice of Allowance, the issue fee will be automatically charged to the deposit account at the time of mailing the notice of allowance. 37 C.F.R. § 1.311(b).

NOTE: 37 C.F.R. § 1.28(b) requires "Notification of any change in status resulting in loss of entitlement to small entity status must be filed in the application . . . prior to paying or at the time of paying . . . issue fee. . .." From the wording of 37 C.F.R. § 1.28(b): (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.

☐ 37 C.F.R. § 1.492(e) and (f) (surcharge fees for filing the declaration and/or filing an English translation of an International Application later than 20 months after the priority date.

Milton Oliver

Signature of practitioner

Reg. No. 28,333

Milton Oliver

(type or print name of practitioner)

Tel. No.: (203) 261-1234

WARE, FRESSOLA, VAN DER SLUYS &

P.O. Address

ADOLPHSON LLP

Customer No.:

004955

755 Main Street, PO Box 224 Monroe CT 06468

(Transmittal Letter to the United States Designated Office (DO/US)—Entry into National Stage under 35 U.S.C. § 371 [13-6]—page 8 of 8)



Practitioner's Docket No	542-007-2	PATENT
--------------------------	-----------	--------

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Aoki

Application No.: 0

Group No.: Examiner:

Filed: herewith

ARRAY SUBSTRATE, DISPLAY DEVICE EQUIPPED THEREWITH, AND For:

MANUFACTURING METHOD FOR ARRAY SUBSTRATE

Assistant Commissioner for Patents Washington, D.C. 20231

EXPRESS MAIL CERTIFICATE

"Express Mail" label numberEV005524177US
Date of Deposit2-14-02
I hereby state that the following attached paper or fee Transmittal letter to the US Designated Office (DO/US)- Entry into the U.S. Nat. Stage Under Chap. I Information Disclosure Statement & Form PTO1449 & copies of refs. International Search Report
PCT/IB/304/308 WO 01/98823 A1 Combined Decl. & Power of Attorney Check no. /8529 for \$992 Assignment in separate envelope with check no. /8530 for \$40.00
is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10, on the date indicated above and is addressed

to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Judith Schick Typed or printed name of person, mailing paper or fee Signature of person mailing paper or fee

NOTE: The label number need not be placed on each page. It should, however, be placed on the first page of each separate document, such as, a new application, amendment, assignment, and transmittal letter for a fee, along with the certificate of mailing by "Express Mail." Although the label number may be on checks, such a practice is not required. In order not to deface formal drawings it is suggested that the label number be placed on the back of each formal drawing or the drawings be accompanied by a set of informal drawings on which the label number is placed.

(Express Mail Certificate [8-3])